



Instructions for Completing the Title V Part 2 Maximum Achievable Control Technology (MACT) Application

This application is required for those Title V sources that are a major source of hazardous air pollutants (HAP) *and* have a source category subject to Section 112(j) Provisions 40 Code of Federal Regulations (CFR) 63.50 Through 63.56 of the Clean Air Act Amendments.

Section 112(j) ensures control of HAP emissions if the EPA misses a scheduled Maximum Achievable Control Technology (MACT) standard promulgation date. If the EPA misses a scheduled promulgation date, major sources of HAP with an applicable source category must submit a Title V Part 2 MACT Application (DEP-AIR-APP-100M) to the DEP at the address specified at the top of the application form, to obtain a source-specific case-by-case MACT. Conditions of the case-by-case MACT determination will be incorporated into their Title V operating permit.

Application Instructions

1. Source Identification

- Provide name of source/facility applying for Title V permit/modification.
- Provide your source identification number, if one assigned. This can be your Title V permit number.
- Identify the primary contact person and phone number for questions on the application.

2. Physical Location

- Provide physical location address of the source.

3. Mailing Address (if different than Physical Location)

- Provide mailing address if different from the physical address.

4. Title V Part 1 MACT Information

- Indicate whether or not any information on the Part 1 MACT application has changed.

Note the changes. The permitting authority may want you to attach a copy of the Part 1 MACT application.

5. Certification and Signature of Responsible Official

A responsible official must certify and sign the application. The responsible official must be authorized in accordance with 22a-174-2a of the Regulations of Connecticut State Agencies (RCSA) and have responsibility for the overall operation of the Title V source.

NOTE: New Signatory Requirements for the Bureau of Air Management.

Effective March 15, 2002, **any** New Source Review or Title V document, including but not limited to a permit application, license transfer request, report or certification, that is submitted to the commissioner shall be signed by certain individuals, as defined in RCSA Section 22a-174-2a. In order to comply with this requirement, complete the *Signatory Responsibilities of RCSA Section 22a-174-2a* (DEP-AIR-SIG-REG-001) form and submit it, prior to or along with, any documents or other information to be signed by the

authorized representative. The form is available on the DEP website at:
www.dep.state.ct.us/pao/download.htm#Air
or by calling 860-424-3026.

Failure to submit this form will delay DEP processing of your request.

6. Required Information

Provide all required information on the table. Prepare a separate table for each affected source. The affected source is the emission point or group of emission points identified in the relevant proposed MACT standard. This table is presented as a suggested format and the amount of space for the information requested should not limit the information provided. Use as much space as necessary to complete the information, including attaching additional pages.

- a. Affected Source:* Identify and provide a brief description of the affected source. If there are multiple identical affected sources, label each with a unique identifier (remember to use a separate table for each affected source). If the affected source is defined broadly and can consist of multiple diverse operations or units, which can each have multiple emission points, prepare a table for each unit or operation.
- b. Source Category:* Identify the relevant source category from the list under “Source Categories” in this document.
- c. Emission Points:* List each emission point in the affected source. Some affected sources may have only 1 emission point; others may have dozens, depending on how the affected source is defined. If there are multiple similar or identical emission points, label each with a unique identifier.
- d. HAP Emitted:* List each known HAP emitted from each emission point. If more

than one HAP is emitted, provide its contributing percent as a percent of total HAP (or total emissions), if known.

- e. Actual/Potential Uncontrolled HAP Emission Rate (lb/hr):* Provide both the actual and potential uncontrolled HAP emission rates (rate prior to any controls). Actual means typical or representative rates during operation of the source. Potential means the maximum capacity of a source to emit HAP under its physical or operational design. If units other than lb/hr are used, or other format more appropriate than an emission rate, please indicate. The emission rates should represent the best possible estimate or measurement available; provide the basis for determining the emission rates. Provide individual HAP emission rates, if available.
- f. Actual/Potential Controlled HAP Emission Rate (lb/hr):* Provide both the actual and potential controlled HAP emission rates (if there are controls in place). If units other than lb/hr are used, or other format more appropriate than an emission rate, please indicate. The emission rates should represent the best possible estimate or measurement available; provide the basis for determining the emission rates. Provide individual HAP emission rates, if available.
- g. Control Technology:* Identify the control technology or other means of emission reduction, if any, currently in place. Identify the emission capture technology/system and capture efficiency.
- h. Existing Federal/State/Local Limitations or Requirements:* Identify all existing Federal, State, and local emission limitations or other emission requirements, including design, equipment, work practice, and operational requirements, that currently apply.

- i. ***Any Other Information Relevant to Establishing the MACT Floor(s):*** Such information would be source dependant. The permitting authority may identify other information requirements, and the source owner or operator may volunteer such information. Such information could include production rates, capacities, etc. It is not possible to identify all such information, if any, for each type of source on this form. The source owner or operator may also choose to recommend a MACT floor for each emission point or affected source. If the MACT floor is recommended, please provide the basis and analysis performed for determining or recommending the floor.

7. Optional Information

Provide any or all information, at the owner or operator's discretion. Use as much space as necessary. Prepare a separate table for each affected source. If you plan to recommend the proposed MACT standard, please reference the standard (date and Federal Register notice cite, e.g., Dec. 12, 2002, 67 FR 3333, NESHAP for Widget Manufacturing). For each emission point, indicate "as proposed", if you are recommending the proposed standard. If there is more than one compliance option for an emission point, indicate which option will be used for that point.

- a. ***Affected Source:*** Use the same identification for the affected source as used in the required information.
- b. ***Emission Point:*** Use the same identification for the emission point as used in the required information.
- c. ***Recommended MACT Limitation:*** Identify recommended emission limitations. The limitations may be in any reasonable format, e.g., lb/hr, ppm, lb/lb production, that relates to MACT and is at least as stringent as the MACT floor. If a

performance-type format cannot be specified (emissions cannot be reasonably measured), then a design, work practice, equipment, operational standard may be recommended, as long as it relates to MACT and is at least as stringent as the MACT floor.

- d. ***Control Technology to be Applied:*** Identify the control technology (or other emission reduction techniques) that would be applied to achieve the MACT limitation. Include technical information on the design, operation, size, estimated control efficiency, and any other relevant information.
- e. ***Recommended Operating Limits:*** Identify recommended operation limits. These would generally be in terms of temperature limits, pressure drop, etc. that are related to the MACT limits. Provide the basis for determining the relationship/correlation to the MACT limits.
- f. ***Recommended Monitoring Requirements:*** Identify the relevant parameters for the control technology (or other emission reduction techniques) to be monitored to demonstrate continuous compliance with the MACT limitation. If continuous emission or opacity monitoring cannot reasonably be established, operating limits may be specified based on monitored parameters as an alternative. Continuous monitoring should be specified, unless not appropriate. If non-continuous monitoring is recommended, explain why continuous monitoring could not be established.
- g. ***Other Recommended Terms and Conditions:*** Identify any other requirements associated with case-by-case MACT you would like to recommend. These can be test methods for determining initial or ongoing compliance, record keeping, and reporting.

- h. Recommended MACT for Emission Points at New Sources*** (commencing Construction or Reconstruction After Issuance of this Permit): Complete a separate table for new sources that recommends new source MACT and other terms and conditions for each emission point.

Selected Definitions

“*Available Information*” means, for the purposes of conducting a MACT floor finding and identifying control technology options under this subpart, any information that is available as of the date on which the first Part 2 MACT application is filed for a source in the relevant source category or subcategory in the State or jurisdiction, and is additional relevant information that can be expeditiously provided by the Administrator, is submitted by the applicant or others prior to or during the public comment period on the section 112(j) equivalent emission limitation for that source, or information contained in the information sources below:

- A relevant proposed regulation including all supporting information.
- Relevant background information documents for a draft or proposed regulation.
- Any relevant regulation, information or guidance collected by the Administrator establishing a MACT floor finding and/or MACT determination.
- Relevant data and information available from the Clean Air Technology Center developed pursuant to 112(l)(3) of the Act.
- Relevant data and information contained in the Aerometric Information Retrieval System (AIRS).
- Any additional information that can be expeditiously provided by the Administrator.

- Any information provided by applicants in an application for a permit, permit modification, administrative amendment, or Notice of MACT Approval pursuant to the requirements of 63.50-63.56.
- Any additional relevant information provided by the applicant.

“*Control Technology*” means measures, processes, methods, systems, or techniques to limit hazardous air pollutant (HAP) emissions, including, but not limited to the following measures which:

1. Reduce the quantity or eliminate emissions, of such HAP through process changes, substitution of materials or other modifications;
2. Enclose systems or processes to eliminate emissions;
3. Collect, capture, or treat HAP when released from a process, stack, storage or fugitive emissions point;
4. Are design, equipment, work practice, or operational standards; or
5. A combination of any or all of the above.

“*Maximum Achievable Control Technology (MACT) For Existing Sources*” means the emission limitation reflecting the maximum degree of reduction of HAP emissions (including prohibition on such emissions, where achievable) that the Administrator, taking into consideration the cost of achieving such emission reductions, and any nonair quality health and environmental impacts and energy requirements, determines is achievable by sources in the category or subcategory to which such emission standard applies. This limitation shall not be less stringent than the MACT floor.

“*MACT for New Sources*” means the emission limitation which is not less stringent than the emission limitation achieved in practice by the best controlled similar source, and which reflects the

maximum degree of HAP emission reduction (including a prohibition on such emissions, where achievable) that the Administrator, taking into consideration the cost of achieving such emission reductions, and any nonair quality health and environmental impacts and energy requirements, determines is achievable by sources in the category or subcategory to which such emission standard applies.

“MACT Floor” means:

1. For existing sources:
 - a. The average emission limitation achieved by the best performing 12 percent of the existing sources in the United States (for which the Administrator has emission information), excluding those sources that have, with 18 months before the emission standard is proposed or within 30 months before such standard is promulgated, whichever is later, first achieved a level of emission rate or emission reduction which complies, or would comply if the source is not subject to such standard, with the lowest achievable emission rate (as defined in section 171 of the Clean Air Act) applicable to the source category and prevailing at the time, in the category or subcategory, or categories and subcategories of stationary sources with 30 or more sources.
 - b. The average emission limitation achieved by the best performing 5 sources in the United States (for which the Administrator has or could reasonably obtain emission information) in the category or subcategory, for the category or subcategory of stationary sources with fewer than 30 sources.
2. For new sources, the emission limitation achieved in practice by the best-controlled similar source.

Source Categories (as of 2/13/03)

Asphalt processing and asphalt roofing manufacturing (2 source categories)

Auto and light duty truck manufacturing

Brick, structural clay products and Clay ceramics manufacturing (2 source categories)

Coke ovens: pushing, quenching, and battery stacks

Combustion turbines

Engine test cells/stands (2 source categories)

Fabric printing, coating and dyeing

Flexible polyurethane foam fabrication operations

Hydrochloric acid production and fumed silica (2 source categories)

Industrial, commercial and institutional boilers, and process heaters (3 source categories)

Integrated iron and steel

Iron foundries

Lime manufacturing

Metal can

Metal furniture

Miscellaneous metal parts and products (inc. Asphalt/coal tar application on metal pipes) (2 source categories)

Miscellaneous organic chemical products and processes (23 source categories)

Organic liquids distribution

Plastic parts

Plywood and composite wood products

Primary magnesium

Reciprocating internal combustion engines

Refractories manufacturing

Reinforced plastics

Semiconductors

Site remediation

Taconite

Wood building products

Additional Resources

Documents

- 112(j) regulation: 40 CFR 63, subpart B (63.50 - 63.56)
- 112(j) proposed amendments: March 23, 2001; 66 FR 16318
- 112(j) final amendments: April 5, 2002; 67 FR 16582
- *National Emission Standards for Hazardous Air Pollutants for Source Categories: General Provisions and Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Sections, Sections 112(g) and 112(j) - Background Information for Promulgated Standards*, EPA 453/R-02-002, February 2002
- *Guidelines for MACT Determinations under Section 112(j) Requirements*, EPA 453/R-02-001, February 2002

Websites

- Air Toxics Website (ATW) Rules and Implementation:
<http://www.epa.gov/ttn/atw/eparules.html>
- Section 112(j) web page:
<http://www.epa.gov/ttn/atw/112j/112jaypg.html>

Contacts

- Individual MACT rule writers are listed on the ATW Rules and Implementation website under the “Table of Completed Regulations”, “Table of Proposed Regulations”, and “Table of Upcoming Regulations”, near the top of the page.
- For information on the section 112(j) rule, contact Rick Colyer, 919-541-5262, colyer.rick@epa.gov.
- EPA regional offices
- State/local permitting authorities